

Supplementary Figure S1

A) Sequences for 5 homomorphic HIST1H2B variants, and for HIST2H2BE

HIST1H2BC

TGGGTGGCTCTTAAAAGAGCCTTTGGGGTTAGGTGTTAAGACGCTTACTT
GGAATGTTTACTTGGAGCTGGTGTACTTGGTGACGGCCTTGGTGCCCTCC
GACACGGCGTGCTTGGCCAGCTCTCCGGGAAGCAGCAGGCGCACGGCCGT
CTGGATCTCCCTGGAGGTGATGGTTCGAGCGCTTGTGTAAATGCGCCAGGC
GGGAAGCCTCGCCCCGCGATGCGCTCAAATATGTCGTTAACGAAAGAATTC
ATGATGCCCCATGGCCTTGGGAAGAGATGCCAGTGTCCGGATGGACCTGTTT
CAGCACCTTGTACACGTACACAGAGTAACTCTCCTTGC GGCTGCGCTTGC
GCTTCTTGCCATCTTTCTTCTGCGCTTTGGTCACTGCCTTCTTGAGCCC
TTCTTCGGGGCGGGAGCAGACTTGGCTGGCTCAGGCAT

HIST1H2BE

ATGCCTGAGCCAGCGAAATCCGCTCCCGCCCCGAAGAAGGGCTCCAAGAA
GGCCGTGACCAAGGCGCAGAAGAAGGACGGCAAGAAGCGCAAGCGCAGCC
GCAAGGAGAGCTACTCCGTATACGTGTACAAGGTGCTGAAACAGGTCCAC
CCCGACACCGGCATCTCCTCTAAAGCCATGGGGATCATGAATTCCTTTGT
CAACGACATCTTCGAGCGCATCGCCGGCGAGGCTTCCCGCCTGGCGCATT
ACAACAAGCGCTCGACCATCACCTCCAGGGAGATCCAGACGGCCGTGCGC
CTGCTGCTTCCCGGGGAGCTGGCCAAGCACGCTGTGTGTCAGAGGGCACCAA
GGCCGTTACCAAGTACACCAGCTCCAAGTAAACTTGTCCCTGCAACTGCC
TTAGTAAACCCAAAGGCTCTTTTCAGAGCCACTCA

HIST1H2BF

ATGCCTGAACCTGCTAAGTCCGCTCCTGCTCCAAAAAAGGGCTCCAAAAA
GGCGGTGACCAAGGCGCAGAAGAAGGATGGTAAGAAGCGCAAGCGTAGCC
GCAAGGAGAGCTATTCCGTGTACGTGTACAAGGTGCTAAAGCAGGTCCAC
CCCGACACCGGCATCTCATCCAAGGCCATGGGCATCATGAACTCCTTCGT
CAACGATATCTTCGAGCGCATCGCTGGCGAGGCTTCCCGCCTGGCGCATT
ACAACAAGCGCTCCACCATCACCTCCAGGGAGATCCAGACGGCCGTACGC
CTGCTGCTGCCCCGGGAGCTGGCTAAGCACGCCGTGTGTCAGAGGGCACCAA
GGCCGTCACCAAGTACACCAGCTCTAAGTAATTCTAACGTCTTCATAACC
AATCCCAAAGGCTCTTTTAAGAGCCACCCA

HIST1H2BG

TTTATGTGAGACTTGAGTGGCTCTGAAAAGAGCCTTTGAGTTTTAAAGCA
CCTAAGCACACATTTACTTGGAGCTTGTATACTTGGTGACAGCCTTGGTA
CCTTCGGACACTGCGTGCTTGGCCAGCTCTCCGGGAAGCAGCAGACGCAC
GGCGGTCTGGATCTCCCTGGAGGTAATGGTCGAGCGCTTGTGTAGTGGG
CCAGACGGGAAGCCTCGCCTGCGATGCGTTCGAAGATGTCGTTAACGAAG
GAATTCATGATGCCATGGCCTTGGATGAGATGCCAGTATCGGGGTGAAC
CTGTTTTAGCACCTTGTACACATACACGGAGTAGCTCTCCTTACGACTGC
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GAACCCTTCTTCGGAGCAGGAGCTGACTTAGCTGGTTCAGGCATG

HIST1H2BI

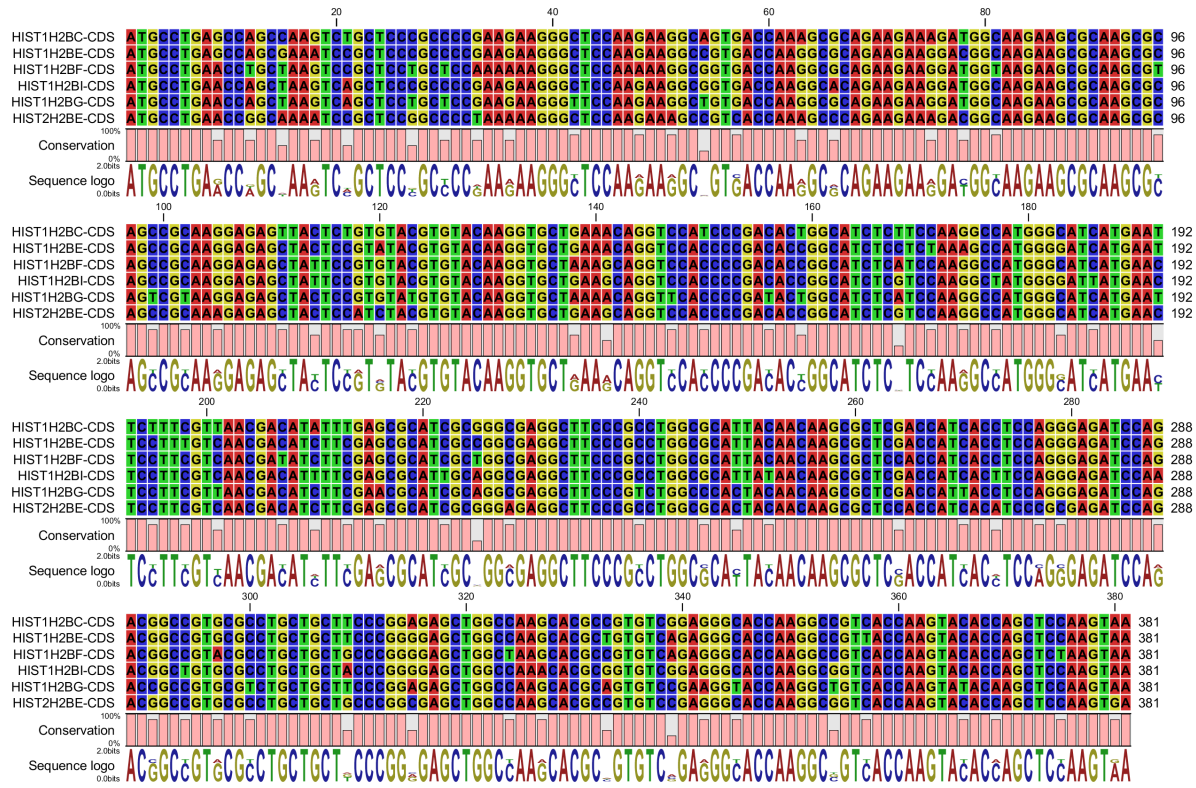
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ATAACAAGCGCTCGACCATCACTTCCAGGGAGATCCAAACGGCTGTGCGC
CTGCTGCTACCCGGGGAGCTGGCCAAACACGCGGTGTGCGAGGGCACCAA
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HIST2HB2E

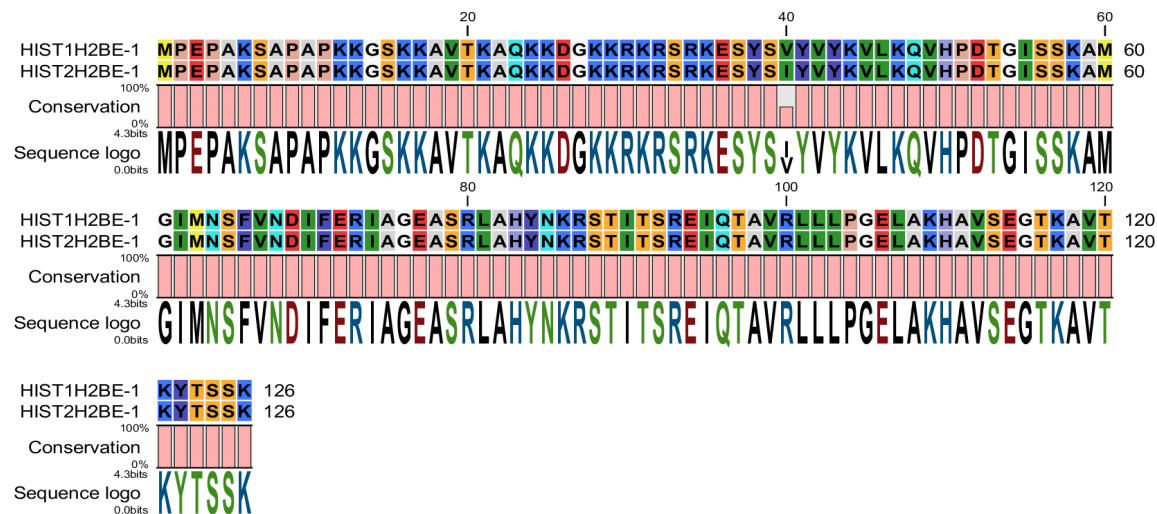
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TAAACTAAAATGCAATTGTCTGCATCTGAGAATACAAGGGTGGACAGT
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AAAAGGAGATTAACCTCTGTAGTCCCGCCTATATTGCATGGCCTCCAGAAA
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TCACATACATCTAATGGAAATGAACAGCACCCCTTCATCCATCCACGGAAG
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GCAGTGTTTGCGGAACCCGGGCTGAATTTGTGTCCTGGAGTTCTCTTAAAT
GACAGCCGAACCTCAGCCACTTCGTTTTAGAATGAAACAGACCCAAGGAGC
CACCAGGGCGCGTGTGGGGCGGGAGTGGGGCGGGTAAAGAGGCGGATTTC
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 GGGCCGGAGCGGATTTTGGCCGGTTCAGGCATGGTAAGACACAGTACAAAC
 GCGGCTTAGCCAAGAAAAGAAGT

B) Alignment of HIST1H2BC/E/F/G/I and HIST2H2BE



C) Amino acid sequence of HIST1H2BC/E/F/G/I and HIST2H2BE



D) Alignment of HIST1H2BE and HIST2H2BE

